

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Formalities

The claims and specification have been amended to correct each of the formal errors noted in items 1 and 2 on page 2 of the Official Action. Because the changes are all formal in nature, it is respectfully submitted that the changes do not involve new matter.

2. Rejection of Claims 1-15, 18, 20, 21, and 27 Under 35 USC §102(b) in view of U.S. Patent No. 6,088,455 (Logan)

This rejection is respectfully traversed on the grounds that the Logan patent fails to disclose or suggest a method of identifying uncorrupted segments of a media signal, as claimed, by:

- a. initially storing a **first media signal that contains undesirable signal components**;
 - b. selecting at least a first search key in the first media signal;
 - c. searching for a second search key in a second media signal that is substantially identical to the first key in the first media signal; and
 - d. comparing segments of the first and second media signals to identify common segments.
- Instead of step a., initially storing a first media signal that contains **undesirable signal components**, the Logan patent pre-stores an **uncorrupted** media signal for use as a template in order to remove undesirable signal components from subsequent media signals. Instead, of steps c. and d., searching for subsequent media signals with **common segments**, Logan compares keys in subsequent signals for **deviations** from the original, uncorrupted key, and seeks to suppress or minimize the deviations according to the preferences of the user.

Even though the claimed invention shares with Logan's system the use of keys to identify related media signals, Logan concerns an entirely different problem than the claimed invention, with an entirely different results. **Whereas Logan seeks to match received signals against a**

template that does not include any undesirable signals, so that the undesirable signals can subsequently be removed, the claimed invention captures a media signal that includes unidentified undesirable signals and seeks to identify the undesirable signals utilizing the principle that desired signals will repeat and undesirable signals will not. Taking the example of a song on the radio, the Logan pre-records the song, and then compares the originally pre-recorded song and checks subsequently received versions of the song against the pre-recorded original for undesired signals such as voice overs. In contrast, the claimed invention records a song that might or might not have undesirable signals, and then checks for common segments in subsequently received versions of the song in order to identify the common segments, which are assumed to belong to the song and not to a voice-over.

According to the invention, a user can be listening to the radio, hear a song that he or she likes, and then hit a manual activation device (claim 4) to begin the key selection process. The next time the song is played, the device will identify the song based on the key and then check for common segments, which are saved as part of an uncorrupted version of the song. According to variations of the invention, the key selection process may be initiated automatically rather than manually (claim 5), for example, based on a particular musical genre, multiple search keys can be used to increase the probability of finding an uncorrupted key (claims 6 *et seq.*), and the process may be iterated for third and additional media signals to find additional uncorrupted segments of the song (claims 2, 3, and others). In each case, the claimed invention starts with a media segment *which may contain undesired components, and seeks to identify those components*, whereas Logan begins with a pre-stored media signal that is known to lack any undesired components, the pre-stored media signal being used as a template not for the identification of desirable components through identification of common segments, but rather for the tailoring of subsequent media signals to user preferences.

According to the method of Logan, if a deviation is found between a broadcast signal and an identification signal (the pre-recorded media signal, described in col. 9, lines 27-40 of the Logan patent), this is seen as an indication that there are some unwanted components present in

the broadcast version of the signal. The proposed means to remove these components are to perform a modulation of the amplitude of the signals to achieve a fade-in effect that allows the music to start with a reduced volume that grows louder during the presence of the unwanted signal components. This has nothing to do with the claimed invention, which does not require storage of an uncorrupted version of an “identification signal,” and does not process corrupted versions of the signal in order to, in effect, hide them. The claimed invention only saves common segments of the signal—the longer the better. If the device of the invention searches long enough, it will eventually be able to save most of the song, especially if it can find two versions of the song with minimal voice-over.

It is noted that in order for Logan to fully take into account user preferences, it needs to know the nature of the undesirable signal components. They may, for example, represent voice-overs, commercials, jingles, *etc.*, so that the user can, for example, select advertisements for elimination and keep the voice overs. The claimed invention makes no such distinctions. Instead, it seeks to identify the song itself, rather than the interruptions, so as to save the song. Differences between segments could have a variety of different sources, and the claimed invention does not need to identify them (although it conceivably could). What is important to the invention are the common segments, which indicates parts of the song itself.

Because of the fundamental differences between the claimed invention and the system of Logan, and in particular the fact that the claimed first search key is selected in a first media signal “containing undesirable signal components,” rather than as part of a pre-recorded clean media signal, the invention using the key to search for subsequent media signals that include common segments rather than to identify undesirable components of subsequent media signal, it is respectfully submitted that the Logan patent does not anticipate the claimed invention, and withdrawal of the rejection of claims 1-15, 18, 20, 21, and 27 is respectfully requested.

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2. Rejection of Claim 28 Under 35 USC §103(a) in view of U.S. Patent Nos. 6,088,455 (Logan) and 4,520,499 (Montlick)

This rejection is respectfully traversed on the grounds that the Logan patent fails to disclose or suggest a method of identifying uncorrupted segments of a media signal, as claimed, by initially storing a first media signal that contains undesirable signal components; selecting at least a first search key in the first media signal; searching for a second search key in a second media signal that is substantially identical to the first key in the first media signal; and comparing segments of the first and second media signals to identify common segments. Instead, the Montlick patent is directed to a reconfigurable lattice filter employed to permit the same circuit to function as a speech synthesizer and as a speech analyzer or recognizer.

Nowhere does Montlick disclose or suggest the claimed search for common segments of a media signal in order to identify uncorrupted segments, and therefore the Montlick patent could not have suggested modification of the method of Logan to identify such common segments. Withdrawal of the rejection of claims 18 is accordingly requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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